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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,222	02/26/2002	Bernd Gigas	87335.3600	6436
30734	7590	01/06/2004	EXAMINER	
BAKER + HOSTETLER LLP			CECIL, TERRY K	
WASHINGTON SQUARE, SUITE 1100			ART UNIT	
1050 CONNECTICUT AVE. N.W.			PAPER NUMBER	
WASHINGTON, DC 20036-5304			1723	

DATE MAILED: 01/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/082,222	GIGAS ET AL.
	Examiner Mr. Terry K. Cecil	Art Unit 1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

#### A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(e). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 9-3-03
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,4-11,14-16 and 21-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,4-11,14-16 and 21-27 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_ .
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ .
- 4) Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_ .
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_ .

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because it does not contain the subject matter of the new limitations “having a leading edge that is generally straight” as shown in the drawings.

### ***Claim Objections***

2. Claim 27 is objected to because “planar” is missing after “second generally” in each of lines 3 and 5.

### ***Double Patenting***

3. Applicant is advised that should claim 4 be found allowable, claim 26 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof; and should claim 21 be found allowable, claim 22 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 4-11, 14-16 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by the Japanese Reference (JP 2-273531), hereinafter “‘531”. As shown in the figures, ‘531 discloses a mixing tank having a impeller (figure 2) comprising a hub 41, twisted portions 42a, 42b and connecting rod 42c radially spacing the portions, wherein the portions have a generally straight leading edge [as in claims 1, 4-11, 14-15 and 26] and wherein the impeller is used in a method mixing that causes dual flow (figure 7) [as in claim 16].

6. Claims 1, 4-11, 14-16 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by the German Reference (DE 19952760), hereinafter “‘760”. As shown in the figures 9 and 11, ‘760 discloses a mixing tank having a impeller comprising a hub N, twisted portions B and B (figure 11) and cylindrical connecting rod V radially spacing the portions, wherein the portions have a generally straight leading edge [as in claims 1, 4-11, 14-15 and 26] and wherein the impeller is used in a method mixing that causes dual flow [as in claim 16].

#### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 21-25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over ‘760” as applied above and in further view of Fasano (U.S. 5,052,892). ‘760 has been expanded above but does not teach the twisted portions [as in claims 23-25] to include differently angled planes. However such is taught by Fasano, see figures 1 and 5 [as in claims 21-22 and 27]. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the blades of Fasano in the invention ’760, since Fasano teaches the benefit of increasing the efficiency of mixing and requiring less power (col. 1).

*Response to Arguments*

9. Applicant's arguments with respect to the claims have been considered but are moot in view of the new grounds of rejection necessitated by amendment.

*Conclusion*

10. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH

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shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Contact Information:

- Examiner Mr. Terry K. Cecil can be reached at (571) 272-1138 (at the Carlisle campus in Alexandria, Virginia) for any inquiries concerning this communication or earlier communications from the examiner. Note that the examiner is on the increased flextime schedule but can normally be found in the office during the hours of 8:00a to 4:30p, on at least four days during the week M-F.
- The group receptionist can be reached at (703)308-0661 for inquiries of a general nature or those relating to the status of this or proceeding applications.
- Wanda Walker, the examiner's supervisor, can be reached at (571) 272-1151, if attempts to reach the examiner are unsuccessful.
- The Fax number for official faxes is 703-872-9306.



Mr. Terry K. Cecil  
Primary Examiner  
Art Unit 1723

TKC  
December 19, 2003